NOTES FOR FIGURE VIII-1-1 & FIGURE VIII-1-2 (Source - AASHTO Green Book)

- 1. The design ADT for improvements shall be based on the ADT projected to the future design year. The future design year is to be established at 20 years from the date of construction of the improvements.
- 2. Design speed may be changed within a single project if the terrain varies to the extent that such a change will result in economy of construction without affecting the safety of the project.
- 3. In urban areas with city standard curb and gutter used for the street section, the required shoulder width includes the curb and gutter section. The shoulder width may be reduced to 2' when the speed limit is posted no more than 30 mph.
- 4. For design ADT greater than 7,500, a standard lane capacity analysis shall be performed to justify the number of lanes requested for the improvement project before programming is accepted. For design ADT less than 100 on local roads, a single lane bridge width of 16 feet may be considered by approved variance. The existing roadbed width must be less than or equal to 16 feet.
- 5. If the minimum stopping sight distances can't be achieved, then an approved design variance will be required.
- 6. The "SAG Vertical Curve K Value" is based on the stopping sight distance. The values shown can be exceeded. Values less than this require a design variance.
- 7. Design for passing sight distance is seldom applicable for urban arterials, collectors, and local streets.
- 8. Grades less than 500 ft (150m) long and one-way down grades may be one percent steep. For extreme cases in urban areas at underpasses and bridge approaches, steep grades for relatively short lengths may be considered.
- 9. A. For urban conditions, the superelevation rate, if used, should be limited to 0.12 ft/ft (0.04 m/m).
 - B. Angles without curves may be used in town and built-up areas where it is necessary to follow existing streets to avoid excessive property damage.
 - C. Spiral curves should be considered on all curves with a radius less than 2500 ft (750m).

10. A design variance for bridge width may be considered for construction of a single lane bridge for rural local roads carrying 2-way traffic with a future design ADT of 100 or less. The curb to curb width of single lane bridge shall be greater than or equal to the existing shoulder width road, but not less than 16 feet. A public hearing will be required to allow public input prior to the programming submittal. A summary of the results of the hearing shall be included with the variance request.